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(54) **CAP FOR BOTTLES CONTAINING FINGERNAIL PRODUCTS**

(57) A cap for bottles containing fingernail products, comprising a tubular body (1) open at a front end and closed at a rear end, wherein the side wall of the tubular body (1) delimits an inner space into which an impregnation part (7) is fitted for applying the product contained inside a bottle. The rear end of the tubular body (1) is closed by means of an independent part made of a transparent material, through which from the outside one can see an additional product (10) applied upon at least a portion of the inner surface of the independent part; wherein the color features of the additional product (10) coincide with the color features of the product contained inside the bottle. Thus, the purpose is to show the user the real color of the fingernail product contained inside the bottle without opening it.

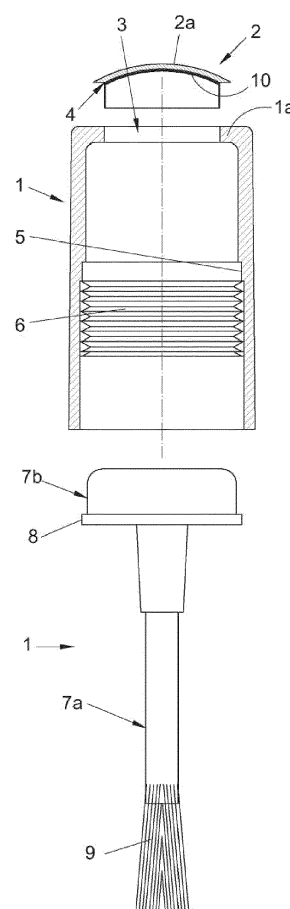


FIG. 1

Description

OBJECT OF THE INVENTION

[0001] The present invention, as expressed in the heading of this specification, relates to a cap for bottles containing fingernail products, such as nail polish, nail gels and especially UV gels, which must be cured with an ultraviolet lamp system.

[0002] The cap of the invention has a characteristic independent part which shows the color of the product contained inside the bottle of nail product.

[0003] Thus, the aim of the invention is to be able to show the user the real color of the nail product contained inside the bottle without opening it, to which end the independent part is impregnated with an additional product in accordance with the color of the product contained inside the bottle.

[0004] As such, the purpose is to place new caps on the market that make it possible to see the color inside the opaque bottle, adapting a new exclusive technology for the different processes, and thereby achieving a product which for all intents and purposes did not previously exist, and was impossible to make due to the high costs of manufacturing with current technologies.

TECHNICAL PROBLEM TO BE SOLVED AND BACKGROUND OF THE INVENTION

[0005] Currently, bottles and caps for bottling UV-gel-type products have by and large been opaque, due to the fact that the gel deteriorates when exposed to light. Therefore, there is a widespread problem in terms of being able to see the colors of the contents of the bottle without opening it. The most commonly chosen solutions are to simulate the color of the product on a descriptive label displayed on the face of the bottle, or to reserve a clear portion when painting the bottle opaque.

[0006] This solution using a "label" is costly and imprecise, because nail polishes and gels have special effects such as opalescence, metallic colors, fluorescence, glitter, etc., which cannot be simulated through printed labels; meanwhile, the option of "reserving" a clear portion when painting the bottle opaque only gives a hint at the color inside, since it is seen in a very small area through the thick wall of the bottle.

DESCRIPTION OF THE INVENTION

[0007] In order to meet the aims and avoid the disadvantages mentioned in the preceding paragraphs, the invention proposes a cap for bottles containing fingernail products, comprising a tubular body open at a front end and closed at a rear end, wherein the side wall of the tubular body delimits an inner space into which an impregnation part is fitted for applying the product contained inside a bottle.

[0008] The rear end of the tubular body is closed by

means of an independent part made of a transparent material, through which from the outside one can see an additional product applied upon at least a portion of the inner surface of the independent part; wherein the color features of the additional product coincide with the color features of the product contained inside the bottle.

[0009] The independent part is a cup-shaped part having a base and an annular wall, through which the cup-shaped part fits into a through hole established in the rear end of the tubular body. In this case, the additional product is incorporated on the inner face of the base of the cup-shaped part.

[0010] At the point where the base meets the annular wall of the cup-shaped part, a carved lip butts up against an outer perimeter area running around the through hole in the rear end of the tubular body.

[0011] In one embodiment, the base of the cup-shaped part has a convex design.

[0012] Moreover, the rear end of the tubular body incorporates an inner annular extension, the perimeter edge of which delimits the through hole that the cup-shaped part fits into.

[0013] For the purpose of helping to make this specification more readily understandable, a set of drawings constituting an integral part of the same has been included below, wherein by way of illustration and not limitation the object of the invention has been represented.

BRIEF DESCRIPTION OF THE DRAWINGS

[0014]

Figure 1.- Shows an exploded view of the invented cap for bottles containing fingernail products.

Figure 2.- Shows an elevation view in cross section of the assembly of the invented cap.

DESCRIPTION OF AN EXEMPLARY EMBODIMENT OF THE INVENTION

[0015] Pursuant to the numbering used in the figures, the cap for bottles containing fingernail products involves the following terminology employed in the description:

- 1.- Tubular body.
- 1 a.- Inner annular extension.
- 2.- Cup-shaped part.
- 2a.- Base.
- 2b.- Annular wall.
- 3.- Through hole.
- 4.- Lip.
- 5.- Perimeter recess.
6. Threaded section.
- 7.- Impregnation part.
- 7a.- Stem.
- 7b.- Head.
- 8.- Annular extension.
- 9.- Bristles.

10.- Additional product.

[0016] The invented cap comprises a tubular body (1) open at a front end and closed at a rear end by means of a cup-shaped part (2) having a base (2a) and an annular wall (2b), through which it fits into a through hole (3) in the rear end of the tubular body (1).

[0017] The cup-shaped part (2) is made out of a transparent material, and at the point where its base (2a) meets the annular wall (2b), a carved lip (4) butts up against an outer perimeter area running around the through hole (3) in the rear end of the tubular body (1).

[0018] In one embodiment of the invention, the base (2a) of said cup-shaped part (2) has a convex design.

[0019] The rear end of the tubular body (1) incorporates an inner annular extension (1a), the perimeter edge of which delimits the through hole (3) that the cup-shaped part (2) fits into.

[0020] The side wall of the tubular body (1) delimits an inner circular-shaped space whose surface is interrupted by a perimeter recess (5) having an angular cross section, below which there is a threaded section (6) as a means of coupling to the neck of a bottle containing the product, not shown in the figures.

[0021] Inside the inner space of the tubular body (1) a product-impregnation part (7) is inserted, which has a stem (7a) and a head (7b) that fits into the tubular body (1) above the threaded section (6), such that said head (7b) has an annular extension (8) that sits into the perimeter recess (5) inside the tubular body (1) as a means of axially retaining said impregnation piece (7), the stem (7a) of which has an end with bristles (9) for applying the product contained inside the bottle.

[0022] At least the inner face of the base (2a) of the cup-shaped part (2) is impregnated with an additional product (10) in accordance with the color of the product contained inside the bottle, such that the user will be able to see the real color of the product contained inside the bottle without opening it. Thus, in this way the user will be able to see the color clearly and over a broad area, including any unique effects such as glitter, shine, tone, etc.

[0023] It is also possible to impregnate the inside of the cup-shaped part (2) using the actual product contained inside the bottle.

the outside one can see an additional product (10) applied upon at least a portion of the inner surface of the independent part; wherein the color features of the additional product (10) coincide with the color features of the product contained inside the bottle.

2. THE CAP FOR BOTTLES CONTAINING FINGER-NAIL PRODUCTS according to claim 1, **characterized in that** the independent part is a cup-shaped part (2) having a base (2a) and an annular wall (2b), through which the cup-shaped part fits into a through hole (3) established in the rear end of the tubular body (1).

3. THE CAP FOR BOTTLES CONTAINING FINGER-NAIL PRODUCTS, according to claim 2, **characterized in that** at the point where the base (2a) and the annular wall (2b) of the cup-shaped part meet, a carved lip (4) butts up against an outer perimeter area running around the through hole (3) in the rear end of the tubular body (1).

4. THE CAP FOR BOTTLES CONTAINING FINGER-NAIL PRODUCTS according to any one of the preceding claims 2 or 3, **characterized in that** the base (2a) of the cup-shaped part (2) has a convex design.

5. THE CAP FOR BOTTLES CONTAINING FINGER-NAIL PRODUCTS, according to any one of the preceding claims 2 to 4, **characterized in that** the rear end of the tubular body (1) incorporates an inner annular extension (1a), the perimeter edge of which delimits the through hole (3) that the cup-shaped part (2) fits into.

6. THE CAP FOR BOTTLES CONTAINING FINGER-NAIL PRODUCTS according to any one of the preceding claims 2 to 5, **characterized in that** the additional product (10) is incorporated on the inner face of the base (2a) of the cup-shaped part (2).

Claims

1. A CAP FOR BOTTLES CONTAINING FINGER-NAIL PRODUCTS, comprising a tubular body (1) open at a front end and closed at a rear end, wherein the side wall of the tubular body (1) delimits an inner space into which there fits an impregnation piece (7) for applying the product contained inside a bottle; **characterized in that** the rear end of the tubular body (1) is closed by means of an independent part made of a transparent material, through which from

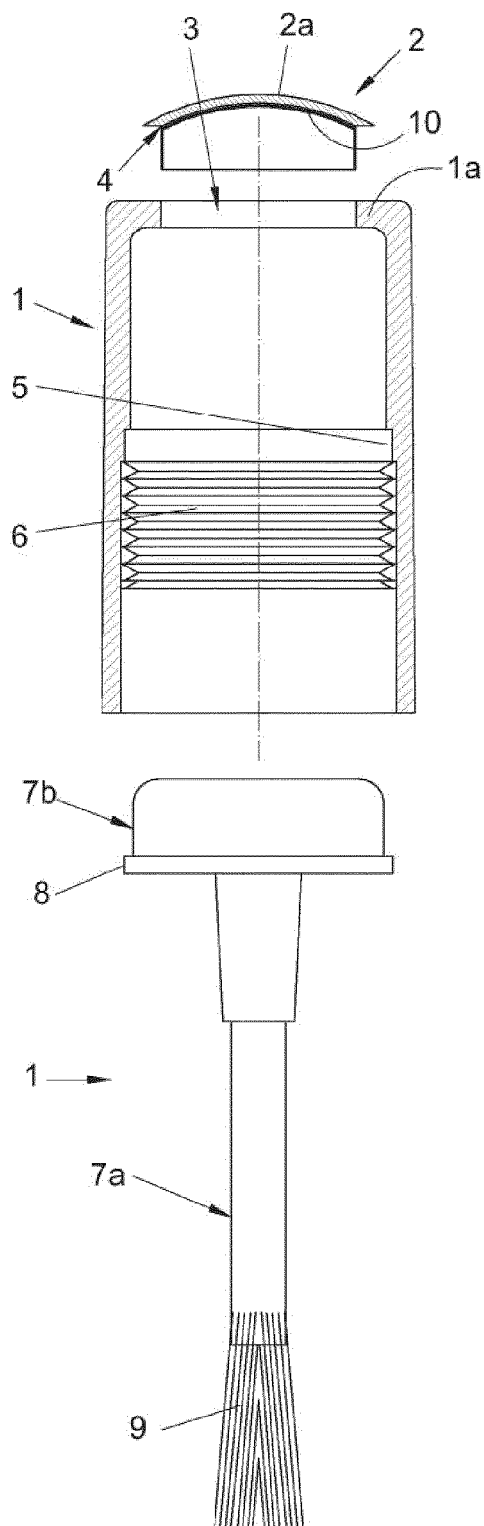


FIG. 1

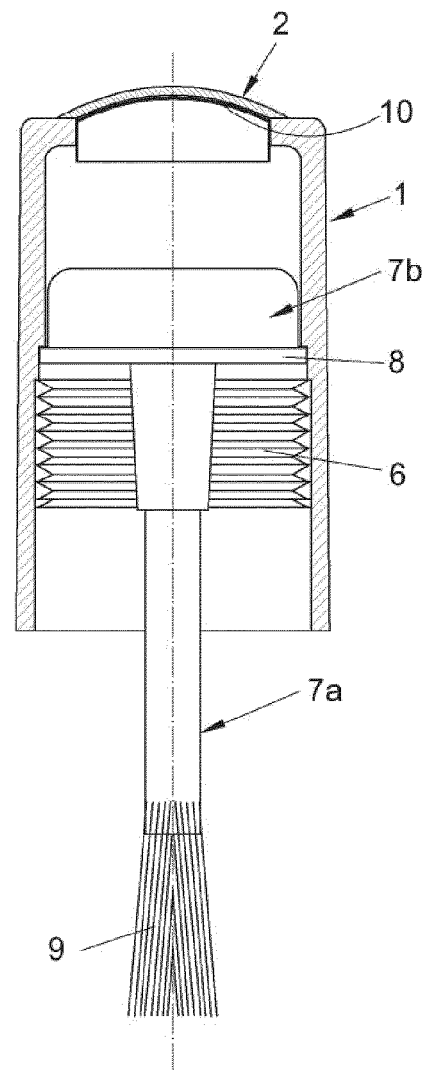


FIG. 2



EUROPEAN SEARCH REPORT

Application Number
EP 15 16 4192

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A	US 5 529 417 A (BURRLADER ALEX C [US]) 25 June 1996 (1996-06-25) * column 1, line 51 - column 5, line 29; figures 1-5 *	1-6	
			TECHNICAL FIELDS SEARCHED (IPC)
			A45D B65D
The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 27 May 2015	Examiner Ionescu, C
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

EPO FORM 1503 03/82 (P04C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT
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EP 15 16 4192

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
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